### MAIL STOP PCT

Attorney Docket: 26443U

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Examiner: Unknown

GMEINER, et al.

Group Art Unit: Unknown

International Application Number: PCT/EP2003/007060

Serial Number: 10/519,487

International Filing Date: 02 July 2003 (02.07.2003)

Filed: December 30, 2004

Title: UTILIZAITON OF HETEROARENE CARBOXAMIDE AS DOPAMINE-D3

LIGANDS FOR THE TREATMENT OF CNS DISEASES

## TRANSMITTAL LETTER

Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

### Sir:

Submitted herewith for filing in the U.S. Patent and Trademark Office is the following:

- (1) Transmittal Letter;
- Information Disclosure Statement; (2)
- (3) PTO Form 1449 with Thirty-eight (38) cited References;
- Copies of Thirty-two (32) cited References.

The Commissioner is hereby authorized to charge any deficiency or credit any excess to Deposit Account Number 14-0112.

Respectfully submitted,

NATH & ASSOCIATES PLLC

Date: March 29, 2005

NATH & ASSOCIATES PLLC

1030 15<sup>th</sup> Street, N.W., 6<sup>th</sup> Floor

Washington, D.C. 20005-1503

By:

Registration Number 26,965

Tanya E. Harkins

Registration Number 52,993

Customer Number 20529

GMN/TEH/le

(202) 775-8383

# MAIL STOP PCT

Attorney Docket: 26443U

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Examiner: Unknown

GMEINER, et al.

Group Art Unit: Unknown

International Application Number: PCT/EP2003/007060

Serial Number: 10/519,487

International Filing Date: 02 July 2003 (02.07.2003)

Filed: December 30, 2004

Title: UTILIZAITON OF HETEROARENE CARBOXAMIDE AS DOPAMINE-D3

LIGANDS FOR THE TREATMENT OF CNS DISEASES

### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### Sir:

An Information Disclosure Statement is submitted herewith pursuant to 37 C.F.R. 1.97-1.98. Please note the following particulars:

[XXX] a. The enclosed statement is being filed within three months of the filing date of a national application, or within three months of the date of entry into the national stage as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing date of a first Office Action on the merits, whichever event occurs last.

- [ ] b. The enclosed statement is being filed after a first action on the merits but before the mailing date of a final action under 37 C.F.R. 1.113, or a notice of allowance under 37 C.F.R. 1.311.

  The enclosed statement is accompanied by [check one]:
  [ ] i. a certification in part (e) below as specified in 37 C.F.R. 1.97(e), or
  [ ] ii. a check in the amount required by 37 C.F.R. 1.17(p).
- [ ] c. The enclosed statement is being filed after the mailing date of a final action under 37 C.F.R. 1.113, or a

Page 2

Attorney Docket: 26443U

notice of allowance under 37 C.F.R. 1.311, but before payment of the issue fee.

- [ ] Certification report(e) below; and [ ] a check in the amount as required by 1.17(p).
- [ ] d. The enclosed statement is being filed pursuant to 37 C.F.R. 1.97(i), for placement in the file.
- [ ] e. Certification [Check one] [Certification is required only if box (b)(i) or box (c) is checked.]
  - I hereby certify that each item of information contained in the enclosed Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement,

or

I hereby certify that no item of information in the enclosed Information Disclosure Statement herewith was cited in a communication from a foreign patent office in a counterpart foreign application, or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Appropriate certification is attached.

- [XXX] f. If no check is enclosed and a fee is due in connection with this communication or if the check enclosed is insufficient, the Commissioner is authorized to charge any fee or additional fee due in connection with this communication to Deposit Account No. 14-0112.
- [XXX] g. Copies of the documents are attached herewith with a completed Form PTO-1449.

[ ] Copies of the documents are not attached as allowed under CFR 1.98(d)(1)(2). The earlier application is identified as:

or

[XXX] Copies of US Patents/Publications not attached as allowed in Official Gazette Aug. 5, 2003/ Vol. 1273, no. 1.

Attorney Docket: 26443U

The Examiner is respectfully requested to cite the documents listed on the attached Form PTO-1449 in the next Office Action. In so doing, the Examiner is respectfully requested to initial in the space adjacent to the listing of each document on the Form PTO-1449, and return a copy of the initialed Form PTO-1449 with the next communication to Applicants, to confirm that these documents have been considered by the Examiner and made of record in this application.

If the Examiner has any questions or wishes to discuss this application, kindly telephone the undersigned at the below-listed number.

Respectfully submitted,

NATH & ASSOCIATES PLLC

Date: March  $\mathcal{L}$ , 2005

By:

NATH & ASSOCIATES PLLC

1030 15<sup>th</sup> Street, N.W., 6<sup>th</sup> Floor Washington, D.C. 20005-1503 (202) 775-8383

GMN/TEH/le

Gary M. Nath

Registration Number 26,965

Tanya E. Harkins

Registration Number 52,993

Customer Number 20529



### FORM PTO-1449

Attorney Docket:

Serial Number: 10/519,487

26443U

Filing: December 30, 2004

Inventor: Interna al Application Number:

GMEINER, et al. PCT/EP2003/007060

Group Art Unit: International Filing Date:

_			Group Art U	Unit:	Internation		ling D	ate:
<u>I</u>	INFOR	MATION DISCLOSURE CITATION	Unknown		02 July 200	3		
			U.S. PATE	NT DOCUMENTS			Sub-	
Exam Init.		Document Number	ment Number Issue Date Name		i	Class		Filing Date
	$\dashv$	6,090,807 A						
		(corresponds to WO						
A	1	96/02246)	18 Jul. 2000	Hellendahl, et al.				14 Jul. 1995
A	2	5,872,119 A	16 Feb. 1999	Wermuth, et al.				10 Dec. 1996
A	13	5,464,632 C1	20 Feb. 2001	Cousin, et al.				29 Nov. 1994
A	4	3,734,915	22 May 1973	Wright Jr., et al.				15 Oct. 1971
A	15	5,985,895 A	16 Nov. 1999	Wermuth, et al.				26 Jun. 1998
A	16	3,646,047	29 Feb. 1972	Wright Jr.,	et al.			02 Feb. 1970
<del></del> _			FOREIGN PA	TENT DOCUMENTS				
						G1 = = =	Su	
		Document Number	Date 1007	Counti	ту	Class	Cla	N/A
	7	97/38989 A1	23 Oct. 1997	WO				Abstract
	8	96/02246 A1	01 Feb, 1996					Abstract
	19	96/02249 A1	01 Feb. 1996	WO				N/A
	10	97/34889 A1	25 Sep. 1997	WO			_	N/A
	11	93/21179 A1	28 Oct. 1993	WO				
A:	12	01/72306 A1	04 Oct. 2001	WO				Abstract
A:	13	00/27357+A1	18 May 2000	WO				Abstract Abstract
A:	14	93/01805 A1 I	04 Feb. 1993	WO				
A:	15	2 027 898 A6 \	16 Jun. 1992	ES				Abstract
A:	16	0 779 284 A1)	18 Jun. 1997	EP				Abstract
A.	17	03/028728 A1 N	10 Apr. 2003	WO				N/A
A.	18	0 343 961 B1	10 Jan. 1996	EP				N/A
A:	19	0 496 692 A1	29 Jul. 1992	EP		_		N/A
A2	20	0 548 356 B1	30 Jun. 1993	EP			ļ	Abstract
A2	21	00/27357 A1	18 May 2000 Including Author, Tit	WO			i	Abstract
	23	Bridges, A.J., et a. Two Step Preparati Letters, Vol. 33, No.	on of Substitut o. 49, Pp. 7499-1	ted Benzo[b]t 7502, (1992).	hiophene-2-	carbo	xylate	es", <u>Tetrahedro</u>
A	24	benzo[b]thiophene",		<u>em.</u> , Pp. 438-4	155, (1986)	. (Ab	stract	)
A	25	Kienhöfer, A., "1-Hydroxy-7-azabenzotriazole (HOAt) and N-[(dimethylamino)-1H-1,2, triazolo-[4,5-b]pyridin-1-yl-methyl-ene]-N-methylmethanaminium hexafluorophosphate oxide (HATU)", Synlett, No. 11, Pp. 1811-1812, (2001).						
A	26	Glennon, R.A., et al., "Arylpiperazine Derivatives as High-Affinity 5-HT <sub>lA</sub> Serotonin Ligands", J. Med. Chem., Vol. 31, Pp. 1968-1971, (1988).						
A	.27	Löber, S., et al., "Fused Azaindole Derivatives: Molecular Design, Synthesis and In Vitro Pharmacology Leading to the Preferential Dopamine D3 Receptor Agonist FAUC 725", Bioorganic & Medicinal Chemistry Letters, Vol. 12, Pp. 2377-2380, (2002).						
A	28	Asghari, V., et al., "Modulation of Intracellular Cyclic AMP Levels by Different Huma Dopamine D4 Receptor Variants", <u>J. Neurochem.</u> , Vol. 65, Pp. 1157-1165, (1995).						
A	29	Sokoloff, P., et al., "Pharmacology of human dopamine $D_3$ receptor expressed in a mammalia cell line: comparison with $D_2$ receptor", European Journal of Pharmacology - Molecula Pharmacology Section, Vol. 225, Pp. 331-337, (1992).						
A	.30	Hayes, G., et al., "Structural Subtypes of the Dopamine D2 Receptor are Functionall Distinct: Expression of the Cloned $D2_B$ and $D2_B$ Subtypes in a Heterologous Cell Line" Molecular Endocrinology, Vol. 6, Pp. 920-926, (1992).						
A	.31	Hübner, H., et al., "Cyanoindole Derivatives as Highly Selective Dopamine D4 Recepto Partial Agonists: Solid-Phase Synthesis, Binding Assays, and Functional Experiments", JMed. Chem., Vol. 43, Pp. 4563-4569, (2000).						
A	32	Hübner, H., et al., "Conjugated Enynes as Nonaromatic Catechol Bioisosteres: Synthesis Binding Experiments, and Computational Studies of Novel Dopamine Receptor Agonist Recognizing Preferentially the D <sub>3</sub> Subtype" <u>J. Med. Chem.</u> Vol. 43, Pp. 756-762, (2000).						
A	33	Pilla, M., et al., dopamine D <sub>3</sub> receptor	Selective inhib agonist", Natur	ition of cocar ce, Vol. 400,	ine-seeking Pp. 371-375	beha , (19	viour 999).	by a partial

FORM PTO-1449

INFORMATION DISCLOSURE CITATION

Attorney Docket:	Serial Number: 10/519,487
26443U	Filing Date December 30, 2004
Inventor:	Internati Application Number:
GMEINER, et al.	PCT/EP2003/007060
Group Art Unit:	International Filing Date:
Unknown	02 July 2003

ll.		Unknown UZ July 2003					
	A34	Perrone, R., et al., "N-[2-[4-(4-Chlorophenyl)piperazin-1-yl]ethyl]-3-methoxybenzamide: A Potent and Selective Dopamine D4 Ligand", J. Med. Chem., Vol. 41, Pp. 4903-4909, (1998).					
	A35	Robarge, M.J., et al., "Design and Synthesis of [(2,3-Dichlorophenyl)piperazin-yl]alkylfluorenylcarboxamides as Novel Ligands Selective for the Dopamine D <sub>3</sub> Recept Subtype", J. Med. Chem., Vol. 44, Pp. 3175-3186, (2001).					
	A36	Pulvirenti, L., et al., "Being partial to psychostimulant addiction therapy" <u>TiPS</u> , Vol. 23, No. 4, Pp. 151-153, (2002).					
	A37 Leopoldo, M., et al., "Structure-Affinity Relationship Study on N-[4-(4-Relationship Study on N-[4-(4-Relationship Study on N-]] butyl]arylcarboxamides as Potent and Selective Dopamine D <sub>3</sub> Receptor LiChem., Vol. 45, Pp. 5727-5735, (2002).						
	A38	Bettinetti, L., et al., "Interactive SAR Studies: Rational Discovery of Super-Potent and Highly Selective Dopamine D <sub>3</sub> Receptor Antagonists and Partial Agonists", J. Med. Chem., Vol. 45, Pp. 4594-4597, (2002).					

Examiner Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP ' 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.